

REMARKS

In the Office Action dated December 17, 2003, the Examiner rejected claims 1, 2, 4, 5, and 7-16 under 35 U.S.C. § 102(b) as being anticipated by Charles Allen et al., *Application of Virtual Reality Devices to the Quantitative Assessment of Manual Assembly Forces in a Factory Environment*, 1995 IEEE 1048 ("Allen et al."); and rejected claims 3, 6, and 17 under 35 U.S.C. § 103(a) as being unpatentable over Allen et al.

By this Amendment Applicants have amended claims 1, 2, 4, 5, 10, 11, 15, and 16. Claims 1-17 remain pending in this case. In view of these amendments and the remarks that follow, Applicants respectfully traverse the rejection of claim 1-17 under 35 U.S.C. §§ 102(b) and 103(a).

I. Claim Rejections Under 35 U.S.C. § 102(b)

The rejection of claims 1, 2, 4, 5, and 7-16 under 35 U.S.C. § 102(b) is respectfully traversed for the following reasons.

First, the Examiner does not allege that Allen et al. teaches each and every recitation of Applicants' claims, as required by the M.P.E.P. See M.P.E.P. § 2131, at 2100-70 (8th ed., rev. Feb. 2003). In making a rejection under 35 U.S.C. § 102(b), the Examiner must show that "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131, at 2100-70 (quoting Verdegaal Bros. v. Union Oil Co. of Cal., 814 F.2d 628, 631 (Fed. Cir. 1987)). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." M.P.E.P. § 2131, at 2100-70 (quoting Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236 (Fed. Cir. 1989)). In rejecting

claims 1, 2, 4, 5, and 7-16 under 35 U.S.C. §102(b), the Examiner did not address the individual recitations of these claims. Instead, the Examiner merely summarized the teachings of the prior art without referencing the elements of the rejected claims. See Office Action ¶ 3.1. Applicants therefore submit that this was an improper rejection under 35 U.S.C. §102(b).

Furthermore, Allen et al. does not teach each and every element of claims 1, 2, 4, 5, and 7-16. Claim 1 recites a combination including, *inter alia*, “a first database comprising a plurality of job functions;” “a first computer that generates a time-based event;” and “a second computer that: receives said time-based event; determines a job function associated with said time-based event; [and] retrieves said job function from said first database.” Allen et al. does not teach at least “a first database comprising a plurality of job functions;” “a first computer that generates a time-based event;” and “a second computer that: receives said time-based event; determines a job function associated with said time-based event; [and] retrieves said job function from said first database,” as recited in claim 1.

First, Allen et al. does not teach at least “a first database comprising a plurality of job functions,” and “a second computer that . . . retrieves said job function from said first database,” as recited in claim 1. Allen et al. discloses a process of monitoring workers while performing tasks in an assembly line and analyzing the recorded data. Allen et al., at 1048. This disclosure of Allen et al., however, does not constitute “a first database comprising a plurality of job functions,” and “a second computer that . . . retrieves said job function from said first database,” as recited in claim 1. Allen et al. mentions the possibility that more extensive use of the process described in the

reference could lead to the creation of a database of information quantifying the stresses involved in various human physical actions sometime in the future. Allen et al., at 1052. This database, however, was merely prophesized in the reference; it did not yet exist. Id. Therefore, this database was clearly not used in the performance monitoring system disclosed in Allen et al. Not only did the database not yet exist, but the reference clearly indicates that the expectation was that the database might one day be created *from the results* of the system disclosed in Allen et al. Id. Accordingly, Allen et al. does not teach at least “a first database comprising a plurality of job functions,” and “a second computer that . . . retrieves said job function from said first database,” as recited in claim 1.

Moreover, Allen et al. does not teach at least “a first computer that generates a time-based event;” and “a second computer that: receives said time-based event [and] determines a job function associated with said time-based event,” as recited in claim 1. As explained above, Allen et al. merely discloses a system of monitoring workers performing tasks in an assembly line and then analyzing this data using a computer. This computer is the only computer mentioned in Allen et al., and it is used for “collection management, information storage, and data analysis,” Allen et al., at 1050-51 & Fig. 6. Accordingly, because Allen et al. only discloses a single computer, the reference does not teach at least “a first computer that generates a time-based event;” and “a second computer that: receives said time-based event [and] determines a job function associated with said time-based event,” as recited in claim 1.

For at least the foregoing reasons, Allen et al. does not anticipate Applicants' claim 1. Accordingly, Applicants request that the rejection of claim 1 under 35 U.S.C. § 102(b) be withdrawn and the claim allowed.

Claim 3 depends upon claim 1 and therefore includes all elements and recitations thereof. As explained above, claim 1 is allowable over Allen et al. Accordingly, claim 3 is likewise allowable over this reference for at least the same reasons given with respect to claim 1. Applicants therefore request that the rejection of claim 3 under 35 U.S.C. §102(b) be withdrawn and the claim allowed.

Claim 15 recites a combination, which includes recitations similar to those of claim 1; namely "a database of job functions;" "a second computer that generates a time-based event;" and "a third computer that receives said time-based event; determines a job function associated with said time-based event; [and] retrieves said job function from said . . . database." As explained above with respect to claim 1, Allen et al. does not teach at least "a database of job functions;" "a second computer that generates a time-based event;" and "a third computer that receives said time-based event; determines a job function associated with said time-based event; [and] retrieves said job function from said . . . database." Accordingly, for at least the foregoing reasons, Allen et al. does not anticipate Applicants' claim 15. Applicants therefore respectfully request that the rejection of claim 15 under 35 U.S.C. §102(b) be withdrawn and the claim allowed.

Claim 16 depends upon claim 15 and therefore includes all elements and recitations thereof. As explained above, claim 15 is allowable over Allen et al. Accordingly, claim 16 is likewise allowable over this reference for at least the same

reasons given with respect to claim 15. Applicants therefore request that the rejection of claim 16 under 35 U.S.C. §102(b) be withdrawn and the claim allowed.

As amended, claims 4, 10, and 11 recite a combination including, *inter alia*, “simulating performance of said physical activity over time.” Allen et al. does not teach at least “simulating performance of said physical activity over time,” as recited in claims 4, 10, and 11. As explained above, Allen et al. merely discloses a system of monitoring workers’ performance of tasks in an assembly line and analyzing collected data. All of the data analyzed in Allen et al. is obtained from monitoring the actual performance of certain tasks using a Dataq® glove and a CDD camera. See Allen et al., at 1049-50. The system disclosed in Allen et al. does not allow for performance simulation. Instead, the system merely collects data by monitoring workers, and then analyzes the collected data. There is nothing in Allen et al. that even mentions using simulation. Accordingly, Allen et al. fails to teach at least “simulating performance of said physical activity over time,” as recited in claims 4, 10, and 11.

Claims 5 and 7-9; and 12-14, depend upon claims 4 and 11, respectively, and therefore include all elements and recitations thereof. As explained above, claims 4 and 11 are allowable over Allen et al. Accordingly, claims 5, 7-9, and 12-14 are likewise allowable over this reference for at least the same reasons given with respect to claims 4 and 11. Applicants therefore request that the rejection of claims 5, 7-9, and 12-14 under 35 U.S.C. §102(b) be withdrawn and the claims allowed.

II. Claim Rejections Under 35 U.S.C. § 103(a)

The rejection of claims 3, 6, and 7 under 35 U.S.C. § 103(a) is respectfully traversed for the following reasons.

To establish a prima facie case of obviousness, three basic criteria must be met. First, the prior art reference or references, taken alone or combined, must teach or suggest each and every element recited in the claims. See M.P.E.P. § 2143.03. Second, there must be some suggestion or motivation in the reference itself to modify the reference in a manner resulting in the claimed invention. See M.P.E.P. § 2143. Third, a reasonable expectation of success must exist. See M.P.E.P. § 2143.02. Moreover, each of these requirements must “be found in the prior art, and not based on applicant’s disclosure.” M.P.E.P. § 2143.

Claim 3 depends upon allowable claim 1, and therefore includes all elements and recitations thereof. As explained above, Allen et al. fails to teach at least “a first database comprising a plurality of job functions;” “a first computer that generates a time-based event;” and “a second computer that: receives said time-based event; determines a job function associated with said time-based event; [and] retrieves said job function from said first database,” as recited in claim 1. Moreover, there is no teaching, suggestion, or motivation expressed in Allen et al. that would lead one of ordinary skill in the art to modify Allen et al. to achieve the combination of elements recited by claim 3. Accordingly, claim 3 is not obvious from Allen et al.

Claim 6 depends upon allowable claim 4, and therefore includes all elements and recitations thereof. As explained above, Allen et al. fails to teach at least “simulating performance of said physical activity over time,” as recited in claim 4. Moreover, there

is no teaching, suggestion, or motivation expressed in Allen et al. that would lead one of ordinary skill in the art to modify Allen et al. to achieve the combination of elements recited by claim 6. Accordingly, claim 6 is not obvious from Allen et al.

Claim 17 depends upon allowable claim 15, and therefore includes all elements and recitations thereof. As explained above, Allen et al. fails to teach at least “a database of job functions;” “a second computer that generates a time-based event;” and “a third computer that receives said time-based event; determines a job function associated with said time-based event; [and] retrieves said job function from said . . . database,” as recited in claim 15. Moreover, there is no teaching, suggestion, or motivation expressed in Allen et al. that would lead one of ordinary skill in the art to modify Allen et al. to achieve the combination of elements recited by claim 17. Accordingly, claim 17 is not obvious from Allen et al.

Further, claims 3, 6, and 17 are patentable over Allen et al. based on their own unique features. The Examiner admits that Allen et al. does not disclose “physiological measurements for people in the 5th -95th percentile of a target population,” as recited in claims 3, 6, and 17. See Office Action ¶ 4.2. The Examiner relies on Official Notice, however, in alleging that “limiting the physiological measurements to people in the 5th - 95th percentile of a target population is old and well known.” Office Action ¶ 4.2.

The Examiner is respectfully reminded of the provisions of M.P.E.P. Section 2144.03, and the precedents provided in Dickinson v. Zurko, 527 U.S. 150, 50 USPQ2d 1930 (1999) and In re Ahlert, 424 F.2d, 1088, 1091, 165 USPQ 418, 420 (CCPA 1970). An Official Notice rejection is improper unless the facts asserted are well-known or common knowledge in the art, and capable of instant and unquestionable

demonstration as being well-known. It is never appropriate to rely solely on "common knowledge" without evidentiary support in the record as the principal evidence upon which a rejection is based. Accordingly, Applicant traverses the Official Notice and requests that the Examiner either cite a competent prior art reference in substantiation of these conclusions, or else withdraw the rejections.

Moreover, even if all elements recited in claims 3, 6, and 17 were present in the Allen et al. (which they are not), the Examiner failed to provide a sufficient motivation to modify the reference in a manner resulting in the present claimed invention. The Examiner stated that

[i]t would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the target population of human assembly line operators in Allen to be limited by the percentile range of the present invention, because it would be useful in quantifying the forces needed for assembly operations in conjunction with the posture adopted by the operators, wherein the information could be used as biofeedback to redesign any stages or give better training for the task that could potentially give rise to awkward physiological strains.

Office Action ¶ 4.2. This statement, however, is insufficient to establish a *prima facie* case of obviousness.

First, it is established that "[t]he level of skill in the art cannot be relied upon to provide the suggestion to combine references." M.P.E.P. § 2143.01, at 2100-125 (citing Al-Site Corp. v. VSI Int'l Inc., 174 F.3d 1308 (Fed. Cir. 1999)). Further, "[a]lthough a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.'" Id. § 2143.01, at 2100-126 (quoting In re Mills, 916 F.2d 680, 682 (Fed. Cir. 1992)) (emphasis added). There is no such suggestion in Allen et al.

Moreover, the Examiner's allegation of obviousness is based on features not recited in Applicants' claims. As previously mentioned, the Examiner alleges that it would have been obvious to modify Allen et al. to include "physiological measurements for people in the 5th-95th percentile of a target population," as recited in claims 3, 6, and 17, because "the information could be used as biofeedback to redesign any stages or give better training for the task that could potentially give rise to awkward physiological strains." Office Action ¶ 4.2. Using biofeedback to redesign stages or give better task training, however, is neither recited in claims 3, 6, and 17, nor in their respective independent claims 1, 4, and 15. While this is not to say that embodiments of the present claimed invention would not achieve these objectives, the Examiner is charged with establishing that the *claimed* invention is obvious, and claims 3, 6, and 17 do not recite the features alleged by the Examiner as being obvious.

For at least the foregoing reasons, claims 3, 6, and 17 are patentable over Allen et al. Applicants therefore respectfully request that the rejection of claims 3, 6, and 17 under 35 U.S.C. § 103(a) be withdrawn and the claims allowed.

III. Conclusion


In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: May 17, 2004

By: 
Robert E. Converse, Jr.
Reg. No. 27,432